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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/726,652 | 12/04/2003 | Takatsugu Takamura | 2003_1757A | 6167 |

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WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

ZEMEL, IRINA SOPHIA

ART UNIT PAPER NUMBER

1711

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/726,652

Applicant(s)

TAKAMURA ET AL.

Examiner

Irina S. Zemel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 5 and 8 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claim 8 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

The invention claimed in claim 8 was non-elected by original presentation as stated in the previous office action. Since applicants can not file an RCE to prosecute invention independent and distinct from the originally presented and examined claims, the prosecution will continue for the invention claimed in the originally presented claims. Claim 8, thus, is still restricted from the other pending claims and is withdrawn from further consideration.

Claim Objections

Claims 1,2, and 5 are objected to because of the following informalities: The claimed amounts of the catalyst are given in % by weight, but no indication with respect to the amounts of what components the percentages of the catalyst constitutes the claimed %. While the claims are not indefinite per se, it is suggested that the claims more specifically claim the amount of the catalyst. Appropriate correction is suggested.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claims 1,2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa, of record.

The rejection of claims 1,2, and 5 stands as per reasons of record applicable to the rejection of claim 4 over Ichikawa set forth in the previous office actions. The reasons are summarized as follows: use of a mixture of two catalysts when each one is explicitly listed as suitable catalyst for the same reactions would have been obvious as functional equivalent of each catalyst with reasonable expectation of adequate results absent showing of unexpected results that can be clearly attributed to use of mixed catalyst. The Declaration filed by the applicants is duly noted but is not considered commensurate in scope with the claimed invention.

Response to Arguments

Applicant's arguments filed 7-20-2006 have been fully considered but they are not persuasive. The applicants argue that the claims are now restricted to the specific amounts of catalysts and that the declaration submitted by the applicants shows unexpected results for the claimed ranges. The examiner does agree that the Declaration provides evidence of unexpected results, i.e., increased reaction rates, for catalytic mixtures containing as little as 0.1 % of zinc chloride and as little as 0.4 % of the second catalyst, stannous chloride, as compared to the similar amounts of either one of the two catalysts. However, the claimed invention claims compositions that can contain as little as 0.1 % of stannous chloride in combination with as little as 0.1 % of

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zinc chloride. While there is reasonable expectation of an ordinary artisan that increased amounts (or upper limits of the claimed catalysts amounts) would also bring about the same increase in the reaction rates, there is no expectation, that at little as 0.1% of each components nor there are any factual evidence to that fact. In summary, while there is sufficient evidence of unexpected results for the invention which is limited to "0.1 to 0.3 % of zinc chloride and 0.4 to 1 % of stannous chloride", there are no evidence for lower amounts of stannous chloride. It is, therefore, suggested that the applicants either limit their invention to the ranges for respective amounts of the components that support the unexpected results or provide additional evidence of such results for the lower amount of the components as compared to similar amounts of single component catalysts.

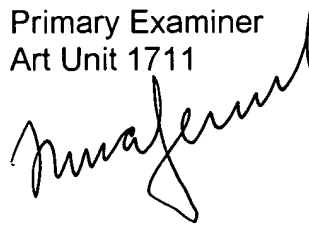
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina S. Zemel whose telephone number is (571)272-0577. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (571)272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Irina S. Zemel
Primary Examiner
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A handwritten signature in black ink, appearing to read 'Irina S. Zemel', written over the printed name and title.

ISZ